In the Claims:

Please cancel claims 30, 35, 66 and 69-70.

1.(Canceled) A method of alleviating a disease or disorder in an affected animal cell, the method comprising locally delivering to the cell a reverse gene therapy vector comprising a promoter operably linked with a nucleic acid encoding a therapeutic gene product which is usually only expressed in cells of an abnormal tissue that is not afflicted with the disease or disorder, whereby delivery of the vector to the affected cell and expression of the gene product therein alleviates the disease or disorder.

2. (Canceled) The method of claim 1, wherein the therapeutic gene product is a protein.

3. (Canceled) The method of claim 2, wherein the protein is selected from the group consisting of a defective HERG protein, an apoptosis-inducing protein, transcription factor E2F 1, tenascin C, bone morphogenic protein, a protein involved in synthesis of a glycosaminoglycan, a dominant negative mutant receptor protein, transcription factor NF-ATc, a mutant fibroblast growth factor receptor protein, and a degradation resistant collagen protein.

4. (Currently amended) ~~The method of claim 3, wherein said protein is~~ A method of alleviating a disease or disorder in an affected animal cell, said method comprising locally delivering to the cardiac cell a reverse gene therapy vector comprising a promoter operably linked with a nucleic acid encoding a therapeutic gene product which is usually only expressed in cells

of an abnormal tissue that is not afflicted with the disease or disorder, wherein said therapeutic gene product is a defective HERG protein, and delivery of said vector to the affected cardiac cell alleviates the disease or disorder.

5. (Currently amended) The method of claim 4, wherein the defective HERG protein is selected from the group consisting of HERG (A561V) protein and MIRP protein.

6. (Canceled) The method of claim 1, wherein the reverse gene therapy vector is selected from the group consisting of naked DNA, a plasmid, a condensed nucleic acid, and a virus vector comprising a nucleic acid.

7. (Canceled) The method of claim 6, wherein the reverse gene therapy vector is a virus vector.

8. (Canceled) The method of claim 7, wherein the virus vector is selected from the group consisting of an adenovirus vector, a retrovirus vector, an adeno-associated virus vector, and a herpes virus vector.

9. (Canceled) The method of claim 6, wherein the reverse gene therapy vector is a condensed nucleic acid.

10. (Canceled) The method of claim 9, wherein the condensed nucleic acid comprises a DNA molecule and a polycationic condensing agent.

11. (Canceled) The method of claim 6, wherein the reverse gene therapy vector is a plasmid.

12. (Canceled) The method of claim 1, wherein the polycationic

condensing agent is selected from the group consisting of poly-L-lysine and Ca^{2+} ions.

13. (Canceled) The method of claim 1, wherein the promoter is a constitutive promoter.

14. (Canceled) The method of claim 13, wherein the promoter is a CMV promoter.

15. (Canceled) The method of claim 1, wherein the promoter is a tissue-specific promoter.

16. (Currently amended) The method of claim ~~15~~,4 wherein the promoter is a cardiac tissue specific promoter.

17. (Original) The method of claim 16, wherein the cardiac tissue-specific promoter is selected from the group consisting of the ANF promoter and the α-MyHC promoter.

18. (Canceled) The method of claim 1, wherein the reverse gene therapy vector further comprises a pharmacological agent-sensitive enhancer.

19. (Canceled) The method of claim 18, wherein the pharmacological agent sensitive enhancer is a phorbol ester-sensitive enhancer.

20. (Canceled) The method of claim 1, wherein the reverse gene therapy vector further comprises a Cre-recombinase-sensitive site.

21. (Canceled) The method of claim 1, wherein the reverse gene therapy vector is delivered to the cell in a sustained-release

manner.

22. (Canceled) The method of claim 1, wherein the reverse gene therapy vector is delivered to the cell in a form selected from the group consisting of a particle comprising the vector, a microparticle comprising the vector, a nanoparticle comprising the vector, an implantable device having a surface coated with a matrix comprising the vector, and a bulk material comprising the vector.

23. (Canceled) The method of claim 22, wherein the implantable device comprises an electrode located in close proximity to a myocardial tissue of the animal.

24. (Canceled) The method of claim 23, wherein the myocardial tissue is right atrial myocardium.

25. (Canceled) The method of claim 1, wherein the cell is located outside the body of the animal.

26. (Canceled) The method of claim 25, wherein the cell is a cultured cell.

27. (Canceled) The method of claim 25, wherein the cell is subsequently returned to the body of the animal from which the cell was obtained.

28. (Canceled) The method of claim 25, wherein the cell is subsequently returned to the body of a second animal other than the animal from which the cell was obtained.

29. (Canceled) The method of claim 1, wherein the cell is located inside the body of the animal.

30. (Canceled) The method of claim 29, wherein the cell is located in a cardiac tissue of the animal.

31. (Currently amended) The method of claim 4 ~~30~~, wherein the cell is a myocardial cell.

32. (Original) The method of claim 31, wherein the cell is a right atrial myocardium cell.

33. (Previously amended) The method of claim 31, wherein the cell is a cell of the crista terminalis.

34. (Currently amended) The method of claim 33, wherein the animal is afflicted with reentry atrial flutter and delivery of said vector alleviates said flutter.

35. (Canceled) The method of claim 34, wherein the therapeutic gene product is a defective HERG protein.

36. (Currently amended) The method of claim 34 ~~35~~, wherein the defective HERG protein is HERG (A561 V) protein.

37. (Original) The method of claim 36, wherein the promoter is a cardiac tissue-specific promoter.

38. (Original) The method of claim 37, wherein the cardiac tissue-specific promoter is selected from the group consisting of the ANF promoter and the α-MyHC promoter.

39. (Withdrawn) A reverse gene therapy vector for alleviating a disease or disorder in an affected cell, the vector comprising a promoter operably linked with a nucleic acid encoding a therapeutic gene product which is normally only expressed in cells of an abnormal tissue that is not afflicted with the disease or disorder, whereby delivery of the vector to the affected cell and expression of the gene product therein alleviates the disease or disorder.

40. (Canceled) The reverse gene therapy vector of claim 39, wherein the therapeutic gene product is a protein.

41. (Canceled) The reverse gene therapy vector of claim 40, wherein the protein is selected from the group consisting of a defective HERG protein, an apoptosis-inducing protein, transcription factor E2F1, tenascin C, bone morphogenic protein, a protein involved in synthesis of a glycosaminoglycan, a dominant negative mutant receptor protein, transcription factor NF-ATc, and a degradation resistant collagen protein.

42. (Canceled) The reverse gene therapy vector of claim 4 1, wherein the protein is a defective HERG protein.

43. (Canceled) The reverse gene therapy vector of claim 42, wherein the defective HERG protein is HERG (A561V) protein.

44. (Canceled) The reverse gene therapy vector of claim 39, wherein the gene therapy vector is selected from the group consisting of naked DNA, a plasmid, a condensed nucleic acid, and a virus vector comprising a nucleic acid.

45. (Canceled) The reverse gene therapy vector of claim 44,

wherein the gene therapy vector is a virus vector.

46. (Canceled) The reverse gene therapy vector of claim 45, wherein the virus vector is an adenovirus vector.

47. (Canceled) The reverse gene therapy vector of claim 44, wherein the gene therapy vector is a condensed nucleic acid.

48. (Canceled) The reverse gene therapy vector of claim 47, wherein the condensed nucleic acid comprises a DNA molecule and a polycationic condensing agent.

49. (Canceled) The reverse gene therapy vector of claim 44, wherein the gene therapy vector is a plasmid.

50. (Canceled) The reverse gene therapy vector of claim 48, wherein the polycationic condensing agent is selected from the group consisting of poly-L-lysine and Ca 2+ ions.

51. (Canceled) The reverse gene therapy vector of claim 39, wherein the promoter is a constitutive promoter.

52. (Canceled) The reverse gene therapy vector of claim 51, wherein the promoter is a CMV promoter.

53. (Canceled) The reverse gene therapy vector of claim 39, wherein the promoter is a tissue-specific promoter.

54. (Canceled) The reverse gene therapy vector of claim 53, wherein the promoter is a cardiac tissue-specific promoter.

55. (Canceled) The reverse gene therapy vector of claim 54,

wherein the cardiac tissue-specific promoter is selected from the group consisting of the ANF promoter, the α-MyHC promoter, and the wild type HERG promoter.

56. (Canceled) The reverse gene therapy vector of claim 55, wherein the cardiac tissue-specific promoter is reverse gene therapy vector from the group consisting of the ANF promoter and the α-MyHC promoter.

57. (Canceled) The reverse gene therapy vector of claim 39, ftu-ther comprising a pharmacological agent-sensitive enhancer.

58. (Canceled) The reverse gene therapy vector of claim 57, wherein the pharmacological agent-sensitive enhancer is a phorbol ester-sensitive enhancer.

59. (Canceled) The reverse gene therapy vector of claim 39, further comprising a Cre-recombinase-sensitive site.

60. (Canceled) A particle comprising the reverse gene therapy vector of claim 39.

61. (Canceled) A microparticle comprising the reverse gene therapy vector of claim 39.

62. (Canceled) A nanoparticle comprising the reverse gene therapy vector of claim 39.

63. (Canceled) An implantable device comprising the reverse gene therapy vector of claim 39.

64. (Canceled) The implantable device of claim 63, wherein the

device has a surface coated with a matrix comprising the vector.

65. (Currently amended) The method of claim 5 ~~4~~, wherein the defective HERG protein is MIRP protein.

66. (Canceled) The method of claim 35, wherein the defective HERG protein is MIRP protein.

67. (Currently amended) The method of claim 65 ~~66~~, wherein the promoter is cardiac tissue-specific promoter.

68. (Previously added) The method of claim 67, wherein the cardiac tissue-specific promoter is selected from the group consisting of the ANF promoter and the α-MyHC promoter.

69. (Canceled) A method for identifying a candidate therapeutic gene, comprised of (A) identifying a first abnormality in cells of an abnormal tissue and (B) selecting a gene on the basis of a beneficial correlation between said first abnormality and an effect of expressing said gene is said cells of said abnormal tissue, wherein said gene is normally associated with a second abnormality that is different from said first abnormality.

70. (Canceled) The method of claim 69, wherein said first abnormality is re-entrant atrial flutter.